Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Rules Governing	)	
the Amateur-Satellite Service	)	RM-
to Add New Frequency Allocations	)	
Granted at WARC-79	)	

PETITION FOR RULE MAKING

The American Radio Relay League, Incorporated (the "League"), the national association of amateur radio operators, and the Radio Amateur Satellite Corporation ("AMSAT"), the national association of amateur radio-satellite operators, do hereby jointly request that the Commission amend its Rules by the addition of certain frequency bands to those listed in Section 97.415 of the Commission's Rules as frequencies available for space operation, earth operation and telecommand operation. The following is stated in support for this request:

1. At present, Section 97.415 of the Amateur-Satellite Service Rules makes the following frequency bands available for space operation, earth operation, and telecommand operation in the Amateur-Satellite Service:

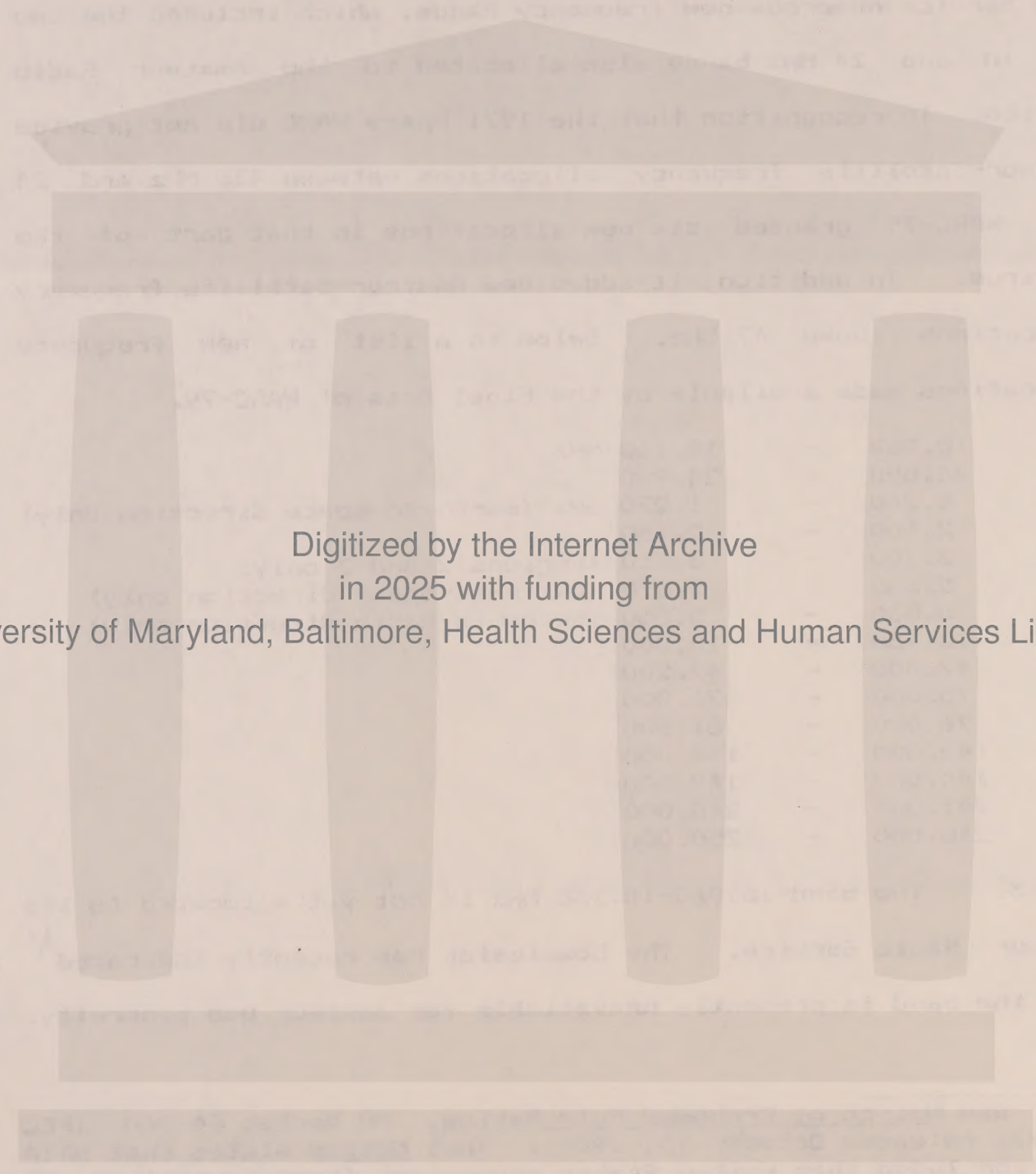
7	–	7.10	MHz
14	–	14.25	
21	–	21.45	
28	–	29.70	
144	–	146.00	
435	–	438.00	
24	–	24.05	GHz

2. The Final Acts of the 1979 World Administrative Radio Conference allocated on a worldwide basis to the Amateur-Satellite Service numerous new frequency bands, which included the two new 18 and 24 MHz bands also allocated to the Amateur Radio Service. In recognition that the 1971 Space WARC did not provide Amateur-Satellite frequency allocations between 438 MHz and 24 GHz, WARC-79 granted six new allocations in that part of the spectrum. In addition, it added new Amateur-Satellite frequency allocations above 47 GHz. Below is a list of new frequency allocations made available by the Final Acts of WARC-79.

18.068	–	18.168	MHz
24.890	–	24.990	
1.260	–	1.270	GHz (earth-to-space direction only)
2.400	–	2.450	
3.400	–	3.410	(Regions 2 and 3 only)
5.650	–	5.670	(earth-to-space direction only)
5.830	–	5.850	(space-to-earth direction only)
10.450	–	10.500	
47.000	–	47.200	
75.500	–	76.000	
76.000	–	81.000	
142.000	–	144.000	
144.000	–	149.000	
241.000	–	248.000	
248.000	–	250.000	

3. The band 18.068-18.168 MHz is not yet allocated to the Amateur Radio Service. The Commission has recently indicated[1/] that the band is presently unavailable for amateur use generally.

1/ See Notice of Proposed Rule Making, PR Docket 84-960 (FCC 84-471, released October 10, 1984). That Notice states that NTIA has concluded that United States government fixed operations in the 18.068-18.168 MHz band would preclude any Amateur Radio Service usage of this band prior to 1989.



Digitized by the Internet Archive
in 2025 with funding from
University of Maryland, Baltimore, Health Sciences and Human Services Library

https://archive.org/details/arrl-petition-rulemaking

As such, the League and AMSAT make no present request herein for the allocation of that band to the Amateur-Satellite Service. At such time as the band is made available for amateur use generally, however, it is suggested that it concurrently be made available for use in the Amateur-Satellite Service as well, in accordance with band plans to be established.

4. The Notice of Proposed Rule Making in Docket 84-960, referenced herein in footnote 1, proposes, inter alia, the allocation to the Amateur Radio Service of the frequency band 24.890-24.990 MHz. In order to allow amateurs to plan for the development of satellites to use this band, the League and AMSAT request that the Commission allocate this band to the Amateur-Satellite Service at the time that a final allocation to the Amateur Radio Service is made in Docket 84-960.

5. The Second Report and Order in General Docket 80-739, 49 Fed. Reg. 2357 (January 19, 1984) implemented into Part 2 of the Commission's Rules the Final Acts of the 1979 WARC. Footnote 664 to the Table of Frequency Allocations therein stated, inter alia, that the bands 1260-1270 MHz, 2400-2450 MHz, 3400-3410 MHz and 5650-5670 MHz are available to the Amateur-Satellite Service subject to not causing harmful interference to other services operating in accordance with the Table of Frequency Allocations. In the case of the 3400-3410 MHz band, the same is available for Amateur-Satellite use only in Regions 2 and 3. Further, the Amateur-Satellite Service use of the 1260-1270 MHz and 5650-5670 MHz bands are limited to the earth-to-space direction only.

6. Footnote 808 to the Table of Frequency Allocations makes the band 5830-5850 MHz available for Amateur-Satellite Service use in the space-to-earth direction on a secondary basis. The Table itself states that in the United States the band 10,450-10,500 MHz is available to the Amateur, Amateur-Satellite, and Radiolocation Services on a secondary basis to the Government Radiolocation Service. Footnote NG134 states that in the band 10.45-10.5 GHz non-government stations in the radiolcoation service shall not cause harmful interference to the Amateur and Amateur-Satellite Services.

7. The 1.26 to 1.27 GHz band is urgently needed in the Amateur-Satellite Service at present, because AMSAT-OSCAR 10 has provisions for an uplink in this frequency band (called Mode L). Although U.S. amateurs were involved in the conception and development of this satellite, OSCAR 10 was designed in the Federal Republic of Germany (FRG) and operates under a license granted by FRG authorities. Mode L is activated on certain days of the week by the AMSAT-DL control operator in the FRG. Thus, at those times that Mode L is activated, U.S. radio amateurs are currently denied the use of OSCAR 10 as a result of the unavailability of the 1.26 to 1.27 GHz band to the Amateur-Satellite Service. 2/

2/ Canadian amateurs and other amateurs throughout the world are presently operating on Mode L. Thus, it is respectfully requested that, at the time a Notice of Proposed Rule Making is issued in response to this Petition, or earlier if possible, a blanket rule waiver be issued to permit temporary use by United States amateurs of the Mode L uplink frequencies.

Inasmuch as radio amateurs are currently permitted to operate in the 1.26 to 1.27 GHz band in the Amateur Radio Service pursuant to Section 97.61 of the Rules, this band should be made usable in the Amateur-Satellite Service without additional concern with respect to interference to the Radiolocation Service.

8. The frequency bands above 2.4 GHz are needed to permit new experimentation by amateurs in the Amateur-Satellite Service. Early allocation of these bands is necessary to provide a basis for development of new satellites, which require years to plan, marshall resources for, construct, and launch. Thus, if the Commission allocates these bands immediately, there will be an inevitable delay of at least three years before AMSAT can launch any satellite using any of these frequencies. Conversely, a delay in allocating these frequencies will have the effect of stifling decisions to begin planning for their use.

9. The League and AMSAT are not presently requesting the allocation of frequencies above 47 GHz to the Amateur-Satellite Service because there is not the urgent need for allocation thereof which exists with respect to the lower-frequency bands discussed hereinabove. Also, these bands are not yet allocated to the Amateur Radio Service, and administrative convenience dictates the allocation thereof to the Amateur Service as an initial matter. The League and AMSAT are, however, certainly not in any manner opposed to allocation of those bands to the Amateur-Satellite Service now if the same will not delay the

allocation of the more urgently needed frequency bands discussed above.

WHEREFORE, the foregoing considered, the League and AMSAT respectfully request that the Commission amend its Rules by the addition of the new frequency allocations referenced in Appendix A to Section 97.415 of the Commission's Rules, to permit the use of those frequency bands in the Amateur-Satellite Service.

Respectfully submitted,

225 Main Street
Newington, CT 06111

THE AMERICAN RADIO RELAY
LEAGUE, INCORPORATED

By: _____
Christopher D. Imlay,
Its Counsel

Booth, Freret & Imlay
1920 N Street, N.W., Suite 520
Washington, D.C. 20036
(202) 296-9100

RADIO AMATEUR SATELLITE
CORPORATION

By: _____
William Lazzaro,
Its General Manager

P. O. Box 27
Washington, D.C. 20044

APPENDIX

Section 97.415 Frequencies available.

The following frequency bands are available for space operation, earth operation, and telecommand operation:

Frequency Bands

kHz	MHz	GHz
7000-7100	21.00-21.45	10.45-10.5
14,000-14,250	24.89-24.99	24-24.05
	144-146	
	435-438 [1]	
	1260-1270 [1][2]	
	2400-2450 [1]	
	3400-3410 [1][3]	
	5650-5670 [1][2]	
	5830-5850 [1][4]	

28-29.7

[1] Stations operating in the Amateur-Satellite Service shall not cause harmful interference to other stations in these bands operating in accordance with the Table of Frequency Allocations. (See International Radio Regulations, RRB-82 footnotes 664, 808 and 918.)

[2] Earth-to-space direction only. (See International Radio Regulations, RRB-82 footnote 664.)

[3] Regions 2 and 3 only.

[4] Space-to-earth direction only. (See International Radio Regulations, RRB-82 footnote 808.)